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ABSTRACT

Since Hunt (1972) coined the term "strategic groups" in his study on the home appliance industry, a growing body of literature, both theoretical and empirical, has used this concept in different ways for different purposes. This paper reviews existing literature and explores the linkage between strategic groups and competitive strategy. The STRATEGIC SPACE (SSP) concept is proposed in order to help the resolution of such issues as the identification of strategic groups and understanding the dynamic behavior of strategic groups.

INTRODUCTION

In the last decade, the nature of a firm's competitive strategy has been realized by both practitioners and academicians as an important element in business success. Competitive strategy "... involves positioning a business to maximize the value of the capabilities that distinguish it from its competitors" (Porter (1980:47)). According to this definition, two major questions are raised in competitive strategy analysis:

1. Who are the firm's competitors?
2. What kind of strategic decisions should an organization take in order to position itself relative to its competitors?

In economics, an industry is often used to define competitive boundaries. Two criteria normally define the boundaries of the industry: markets and technologies. The market criterion (e.g., Caves (1977)) includes within a specific industry those firms that have products sufficiently similar as to be close substitutes. This similarity is tested by the cross-elasticity of demand. The technological criterion (e.g., Andrews (1951)) focuses upon the classification of firms according to the similarity of their production processes. In the United States, the Standard Industrial Classification, or S.I.C., follows the market criterion by defining industries in product terms. (See McGee and Thomas (1986) for a comprehensive discussion.)

With the difficulties of satisfying both market and technological criteria, and with the increasing industrial complexity since World War II--diversification of products, participation in several "industries" and multinational activity--the definition of the set of

competitors for a given firm (i.e., the industry) has become increasingly imprecise. To illustrate the problem, (Huff, Thomas, and Fiegenbaum (1985)) consider the response of Walter Wriston, the Chief Executive Officer of CITICORP, when asked to identify his competitors:

> Sometimes Wriston mentions Morgan Guaranty... otherwise, Wriston sees his competition as being Merrill Lynch, the American Telephone and Telegraph Company, Sears Roebuck and company, Prudential-Bache and the American Express company. (Bennett (1983:16))

These comments indicate that the problem of defining the firm's competitors (i.e., industry or competitive set) is an increasingly difficult issue in formulating competitive strategy.

In his doctoral dissertation on competitive processes in the "white goods" industry, Hunt (1972) coined the term "Strategic Group" (SG) for the finer classifications that exist within industries. He observed that different firms in the industry adopted different strategies in order to achieve their organizational goals. Indeed, firms similar in their strategic behavior were clustered into a strategic group.

The concept of strategic groups allows firms to make more sense of competition in analyzing complex industries (McGee and Thomas (1985)), in defining firms' competitors, and in illustrating the competitive positions available within an industry. Based on the concept of strategic groups, Caves and Porter (1977) generalized the theory of entry barriers (Bain (1956), Vernon (1972), Scherer (1980)) and devised the term "mobility barriers." The theory of Mobility barriers argues that barriers not only protect firms in a strategic group from entry by firms outside the industry but also provide barriers to firms

within the industry shifting strategy positions from one strategic group to another.

Based on the concepts of strategic groups and mobility barriers, Porter (1979) developed a theory that explains interfirm performance differences. According to this theory, the structure of strategic groups (the height of mobility barriers, number of strategic groups, distance between groups, etc.) affects the process of rivalry within the industry and hence both the average profit and the dispersion of firms' profits. In addition, mobility barriers enable some strategic groups to maintain persistent performance advantages over other strategic groups. Thus, the concept of strategic groups provides important frameworks for analyzing competitive strategy.

In the next section we review the literature on strategic groups and go on to link the strategic group concept with the analysis of competitive strategy.

STRATEGIC GROUPS: LITERATURE REVIEW

For research on strategic groups, it is crucial to understand what the word "strategy" means. Therefore, the first part of this section illustrates some different approaches which have been suggested for operationalizing the strategy concept. Workable guidelines (rather than theoretical arguments) are stated to provide benchmarks for identifying a firm's strategy. In the second part of this section, strategic groups studies are reviewed from a number of relevant perspectives and important findings are summarized.

Strategy

Despite many studies exploring different aspects of firms' strategy, there is no clear consensus on the word's definition. The word "comes from the Greek strategos, a 'general' which in turn comes from roots meaning 'army' and 'lead'" (Bracker (1980: 219)). A strategist in Greek literature was, therefore, the individual who planned and managed wars. In the last three decades, the importance of a "strategist's viewpoint" for running an organization was realized by both business practitioners and academicians. Chandler, a business historian, is one of the pioneers in the development of the field. According to Chandler (1962: 13) "strategy" is:

> ... the determination of the basic long-term goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.

Chandler did not differentiate the processes of strategic formulation from the concept itself. He also ignored the important strategic link between the firm and its environment. However, Chandler's study was the springboard for further contributions concerned with the definition and the meaning of the concept. Many other authors (e.g., Andrews (1971), Ansoff (1965), Cannon (1968), Steiner (1969), Katz (1970), Ackoff (1970), Paine and Naumes (1974), Glueck (1976)), also addressed different aspects of strategy. These include such perspectives as its breadth, its components, the characteristics of its objectives, the levels of strategy, and so forth.

Chaffee (1985) examined studies on the strategy concept and classified them into "three models of strategy." First, according to the linear model, strategy consists of decisions, actions, and plans

that will be taken by the firm in order to achieve its goals. The strategy of firms which fit this model is characterized by changing markets, products, and other activities. The writings of Chandler (1962), Cannon (1968), Andrews (1971), Drucker (1974), and Steiner and Miner (1977) rest on such a linear model. Second, adaptive strategy is concerned with the development of a viable match between the opportunities and risks present in the external environment and the organization's capabilities and resources for exploiting those opportunities" (Hofer (1973: 3)). Adaptive strategy tries to achieve a match between the firm and its environment. In contrast to the linear model the adaptive model considers a firm's action or reaction as a response to the nature and magnitude of environmental changes and pressures. Hofer (1973), Hofer and Schendel (1978), Mintzberg (1978), Quinn (1980), Gluck et. al (1982) employ this model. Finally, Chaffee calls the third model interpretive strategy, for it looks at strategy from the viewpoint of the organization's culture. In this model, strategy becomes the "orienting metaphors to motivate behavior expected to produce favorable organizational results" (Chaffee (1985:83)). Different groups and stakeholders can affect the firm's strategy and, therefore, good strategy can be achieved by fostering sound communication and relationships between the various stakeholders. Such writers as Pettigrew (1977), Van Cauwenbergh and Cool (1982), Dirsmith and Covaleski (1983), and Chaffee (1985) emphasize the relevance of the interpretive model.

In trying to find a workable guideline (rather than theoretical arguments) to identify strategy, the following statements should be considered:

(1) Strategy is "a pattern in a stream of decisions" (Mintzberg (1978: 934)). This view of strategy stresses the longitudinal nature of strategic development and its internal consistency.

(2) "The decision must be important to the success of the enterprise" (Shirley (1983: 265)). This statement emphasizes that only decisions that can affect the success (or failure) of the enterprise should be considered as strategic decisions.

(3) It is important to relate strategy to organizational level. Hofer and Schendel (1978) emphasize four levels of an organization that different strategic questions should be raised in each level. At the enterprise strategy level, strategy is concerned with the question of "how can we maintain the political legitimacy of the organizations?" (Hofer and Schendel (1978:15)). At the corporate strategy level, the question is "what set of businesses should we be in?" (Hofer and Schendel (1978: 27)). At the business strategy level, the question is "how to compete in a particular industry or product/market segment." (Hofer and Schendel (1982: 27)). And at the functional strategy level, the question is on the "Maximization of resource productivity" (Hofer and Schendel (1978:29)).

(4) For each level of organizational strategy, four components of strategic decisions can be identified:

1. Scope, that is, the extent of the organization's present and planned interactions with its environment.

2. Resource Deployment, that is, the level and pattern of the organization's past and present resource and skill deployments.

3. Competitive Advantage, that is, the unique position an organization develops vis-a-vis its competitors.

4. Synergy, that is, the joint effects that are sought from the organization's resource deployments and/or scope decisions" (Hofer and Schendel (1978: 25)).

(5) It is important, as noted by Mintzberg (1978), to distinguish between two major kinds of strategies, intended and realized. Intended strategy is an ex-ante concept whereas realized strategy is an ex-post result. Mintzberg suggests that these two strategies should be studied so that "...the interplay between intended and realized strategies may lead us to the heart of this complex organizational process" (Mintzberg (1978: 934)).

In summary, the five perspectives above can serve as a guideline for the purpose of formulating strategic groups. More specifically,

items 1, 3 and 4 (longitudinal, level and component, respectively) define what may be called the Strategic Space (SSP). Either intended

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Insert Figure 1 About Here

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or realized strategy can be drawn on this space (item 5). Item (2) above emphasizes that strategic decisions are important to the success (or failure) of the organization. Therefore, the important dimensions which define strategic groups should reflect matters of salience and importance to the company.

Strategic Groups: Review and Perspectives

Since Hunt (1972) coined the term, both theoretical and empirical literature has used the concept of "strategic groups" in different ways. Researchers in industrial organization economics, strategic management, marketing, among others, have all employed the concept. An extensive research review is available in McGee and Thomas (1986). In this paper the review of studies on strategic groups falls into the following categories.

1. Fundamentals of strategic groups theory.
2. The theory of strategic structure within an industry and firm performance.
3. Strategic group formation and the behavior of firms and groups over time.
4. Summary of the empirical studies on strategic groups.
5. The relevance of strategic groups for competitive strategy analysis.

Fundamentals of Strategic Groups Theory

The traditional paradigm in the field of industrial organization economics argues that firm performance is strongly influenced by market structure. Market structure includes elements such as seller concentration, barriers to entry and exit, product differentiation, industry growth, and economies of scale (see Bain (1956), Vernon (1972), Caves (1977), Scherer (1980)). The logic of this paradigm is that market structure influences the market conduct of the firms and that in turn determines market performance. The crucial assumption is that all firms are profit maximizers and sharing the constraints of market structure, will tend to behave in the same way.

> Firms in an industry are assumed to be alike in all economically important dimensions except for their size (Porter (1979; 214)).

The homogeneity assumption, which considers each firms' behavior (strategy) to be alike, was the reason that firm behavior elements were ignored in the structure/performance paradigm. A number of empirical studies (e.g., Comanor and Wilson (1967), Hall and Weiss (1967), Collins and Preston (1968), Shepherd (1972), Gale (1972), Bass, Cattin and Wittink (1978)) have confirmed that firms' profits in an industry can be partially explained by market structure elements.

In the last decade, more attention has been paid to the relevance of firms' behavior. Newer industrial organization (IO) paradigms attempt to integrate more formally the firm's performance with its conduct as well as with the market structure. The main argument in the "behavioralist" paradigm, namely, that a firm's strategic choice has an impact on the firm's performance, brings the industrial

organization and strategic management disciplines closer to each other. Strategic management writers argue that the study of a firm's conduct should be the primary focus for research (see Porter (1981a) for the contribution of I.O. to strategic management.) Empirical studies (e.g., Hatten (1974), Patton (1976)) have shown that firm-level conduct (strategy) variable(s) contribute to the explanatory power of the structure/performance paradigm.

Investigating the strategic patterns in the "white goods" industry, Hunt (1972) realized that within the industry, groups of firms use different strategies. Hunt coined the novel term strategic groups to characterize the strategic diversity within the industry. According to Hunt (1972; 8-16) a strategic group is defined as:

> A group of firms within the industry that are highly symmetric ... with respect to cost structure, degree of product differentiation, degree of vertical integration, and the degree of product diversification ... formal organization, control systems, and management rewards and punishments ... (and) the personal views and preferences for various possible outcomes.

From an industrial organization point of view, the clustering of companies into strategic groups has an important contribution to the structure/conduct/performance paradigm. The empirical findings have shown that the explanation of firm performance in an industry improves when strategic group factors are included as independent variables (e.g., Newman (1973)). In addition, different relationships between profit and strategy were found for firms in different strategic groups (e.g., Hatten (1974), Patton (1976)). From a strategic management point of view, the recognition of strategic groups within an industry has the important implication that it occupies an intermediate level

between the industry and the firm for analyzing the nature of competitive strategy.

Based on the concept of strategic groups, Caves and Porter (1977) developed the concept of mobility barriers, a modification of the entry barrier (Bain (1956)) idea. Theories about entry barriers argue that existing firms are protected from new entrants into the industry by such elements as economies of scale, product differentiation, and the like. The mobility barriers theory argues that barriers impede not only newcomers but also firms in the same industry but with different asset configurations who might wish to improve their relative strategic positioning by moving into another strategic group.

In summary, it is argued here that the strategic groups concept is important. More specifically, the concept is important in examining the structure/conduct/performance paradigm, the nature of intra-industry structures and their effects on firm performance, and the duality of mobility barriers and strategic groups. Two topics are explored in the following sections, namely, the theory of the strategic structure within an industry and firm performance, and strategic groups formation and the behavior of firms and groups over time.

The Theory of the Strategic Structure Within an Industry and Company's Performance

Porter (1979, 1980) presents a theory of the determinants of firm profit performance based on the strategic structure within the industry. Based on the concepts of strategic groups and mobility barriers, the theoretical explanation is divided into the following steps:

a) The configuration of strategic groups within the industry has an impact on the overall performance of the industry. Porter (1979; 218) suggested that the number and size distribution of strategic groups, the strategic distance[1] among strategic groups, and the market interdependence among groups are the major variables which define configuration. The greater the number of strategic groups, when most of the groups have equal size, then the greater is the rivalry among them or the greater is the chance of tacit collusion. On the other hand, when few strategic groups exist, and the size distribution of these groups is not equal, this structure gives advantage to the large strategic groups; tacit collusion is not expected.

It is also expected that the greater the distance among strategic groups, the more difficult will be any tacit collusion, and the more likely strong rivalry will exist within the industry.

Market interdependence indicates the degree to which different strategic groups compete for the same customers. It is expected that with a high level of interdependency, competition will not only be intense but varied in form reflecting the diverse asset structures of competitors.

Hergert (1983) developed statistical measures for the strategic groups configuration. He was able to show that some of the expected relationships between strategic groups configurations and industry

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[1]Harrigan (1985) and Hergert (1985) have measured strategic distance in terms of the distance (difference) between the centroids of the strategic groups (defined in terms of the relevant and important strategic variables).

profits were in the expected direction (as were hypothesized by Porter (1979)).

b) The location of the strategic group relative to other strategic groups may convey advantages or disadvantages to the group's members. There are several possible reasons. First, some types of strategies are more suited to market conditions than others, and can result in superior performance. Thus, firms which belong to better performing strategic groups will have the opportunity to achieve above industry average profit. Second, each strategic group has a different ability to protect itself from competitive firms in other strategic groups (Caves and Porter (1977)). Strategic groups with significantly superior mobility barriers are better able to exploit profit opportunities. McGee (1985) and McGee and Thomas (1986) categorized the mobility barriers into three classes: market, supply and firm-specific strategic variables. In addition, mobility barriers may also arise from what Lippman and Rumelt (1981) called the concept of "uncertain imitability," meaning that even if a firm wants to replicate the strategy of firms in a superior strategic group, it may fail because of its uncertainty about how to imitate and implement that strategy in practice. Third, the degree to which firms in the same strategic group compete amongst each other can also affect the average profit of the group relative to other groups. When firms in the same strategic group try to improve their position, other firms may retaliate, and the potential profit of the strategic group as a whole may decrease.

c) The location of the firm within the strategic group affects the firm's performance. The rationale for this proposition is given by Porter (1979; 218-219):

> While firms following similar strategies will likely be of comparable scale, scale differences may work to the disadvantage of smaller firms in the group where there are aspects of the strategy (e.g., captive distribution) subject to economies of scale.

d) The ability of the firm to implement its strategy will also affect the firm's performance. Some firms are better organized, managed, controlled than others, which will give them superior performance (see Galbraith and Nathanson (1978) for a comprehensive discussion on strategic implementation).

In summary, the concept of strategic groups was developed by Porter in order to structure a theory of interfirm performance differences. Four elements are the fundamentals of this theory. First, the configuration of strategic groups (e.g., the number of groups and the size distribution of groups) has an impact on the overall performance of the industry. Second, the location of a strategic group relative to other industry level strategic groups may have performance implications for group members. Third, the location of the firm within the strategic group may influence its performance. Fourth, the ability of the firm to implement its strategy may affect its performance.

Strategic Groups Formation and the Behavior of Firms and Groups Over Time

Why and how do strategic groups form? How do they behave over time? How do firms move within and between groups? These questions have not yet attracted much attention.

The Formation of Strategic Groups:

A necessary condition for the formation of strategic groups is that companies within an industry behave differently. Economics and organization theories suggest several rationales for this phenomenon.

a) Different firms have different goals: profit maximizing (Stigler (1964)), revenue maximizing (Baumol (1967)), growth maximizing (Morris (1964), Williamson (1966)) or management utility maximizing (Williamson (1963).

b) Even if firms compete for the same goal, different strategies can be used to achieve those goals. Hergert (1983: II-2) developed an industry level mathematical model which assumed that member firms maximize the same goals (utility function) and yet found that they achieved them through the use of markedly different strategies. This implies that firms within industries may adopt dissimilar strategies even when they are trying to achieve similiar goals.

c) Firms make different assumptions about the future potential of the industry (Porter 1980; 49), which may lead them to behave differently.

d) Firms have different skills and resources. For example, new entrants don't have the same experience as established firms (Henderson (1979)), giving the latter firms a potential competitive advantage over new entrants. To compete effectively, the new entrants will look for other competitive dimensions: unique skills or resources in marketing, production, research and development, and the like.

e) Changes in the industry environment--growth or decline in demand, technical change or whatever--will affect different firms in different ways.

Firm-level and Group-level Behavior Over Time:

To understand the dynamic characteristics of strategic groups requires two levels of investigation: the firm and group.

Firm level: The theory of strategic groups argues that firms within an industry can be clustered into groups. Most studies in the area of strategic groups either specify current strategic groups or investigate the relationship between performance and strategy for different strategic groups. However, it is argued here that strategic group studies can contribute to our understanding of the firm's strategic behavior. More specifically, once strategic groups are identified, and firms make sense of the strategies of close competitors, it is likely that strategic group members (firms) will follow similar strategies over time. Several explanations can be offered to support this viewpoint. First, firms in the same strategic group have similar assumptions about the future potential of the industry (Porter (1980)). Secondly, strategic group members have similar goals and the skills that are required to achieve these goals. If there is either an external or an internal change in the industry, all strategic group members are expected to react in the same way (Caves and Porter (1977: 251)). This argument is consistent with the adaptive model of firm's strategy (Chaffee (1985)). Moreover, taking the adaptive model one step further, firms within the same strategic group have similar mechanisms for strategic adaptation, and these adaptation mechanisms differ across strategic groups. Even if a firm is not "happy" with its current strategy, it is not easy to move to a more successful strategic group. Such strategic barriers such as mobility barriers

(Caves and Porter (1977), McGee and Thomas (1986)), uncertain imitability (Rumelt (1981)) and inertia (Huff, Thomas and Fiegenbaum (1985)) may induce firms to remain in the same strategic group. Three empirical studies on firm movement among strategic groups support this proposition. Oster (1982) observed that few firms moved between the two strategic groups she defined (as below and above the industry average of advertising over last year sales). Fiegenbaum and Primeaux ((1983), (1985)) also found low level of firm movement among strategic groups when strategic groups were defined in terms of market share and several other strategic variables.

In summary, strategic group members will probably follow similar strategies over time. Similarities involving strategic assumptions, goals, skills, and the strategic barriers that prevent firms from easily moving among strategic groups explain this phenomenon, and studies, such as Oster (1982) and Fiegenbaum and Primeaux ((1983), (1985)) provide empirical support.

Group level: In the previous section it is argued that strategic group members will follow similar strategies over time. Therefore, the composition of strategic group membership is most likely to be the same over time. However, another important aspect of strategic group behavior over time is whether or not the strategic group as an entity will move toward a new strategic position in the strategic space.

Organization theories argue that the organization's environment is unstable (e.g., Dess and Beard (1984)) and that firms are trying to adapt their strategic behavior to environmental change (e.g., Miller and Friesen (1980), Hofer and Schendel (1978), Chaffee (1985)). The

final outcome may be that the strategic group as a whole will be located in a new position over time. This, however, depends on the strategic group members' ability to differentiate themselves viably from other strategic groups.

In addition, the studies of Kumar, Thomas, and Fiegenbaum (1984a, 1984b) have looked at strategic groups from a different angle in order to identify the feasible strategic group positions within the strategic space. These studies are primarily deductive in nature and explore a fundamental theoretical issue; namely, whether there are limits to the numbers of strategic groups which may exist within a specific industry context. Using the notion of equilibrium as a benchmark, Kumar et al. (1984a) specified the strategic groups that may exist in equilibrium under "dominant strategy" assumptions. The concept of dominant strategy assumes that only firms which have the "right strategic mix" (strategy) will survive the competitive game. The weaker firms will be dominated by the more successful firms. Kumar et al. (1984b) also used a game theoretic approach to investigate some other properties of strategic groups in equilibrium. They concluded that in a monopolistic competitive market, the number of strategic groups that will exist in equilibrium depends on environmental conditions "if there are K uncontrollable variables in the utility function, then there can be <u>at most</u> (K + 1) strategic groups in a "structurally stable "equilibrium" (p. 8). (The K structurally uncontrollable variables, represent the environmental variables of the model).

These approaches in strategic group studies are important because they include the future as another important dimension for strategic group analysis. They argue that equilibrium positions represent viable future competitive positions which will emerge as the industry evolves. (Also see Camerer (1985) for the importance of equilibrium and game theoretic approaches for "redirecting research in business policy and strategy").

In summary, the strategic rationale of firms and the pattern of group behavior over time have been examined here. It is argued that group membership is likely to remain stable over time. On the other hand, the strategic group as a whole may be located in a new position on the strategic space over time. Studies by Kumar, Thomas, and Fiegenbaum (1984a, 1984b) have also suggested an alternative way of examining strategic groups, namely, in terms of their future rather than past or present orientation. In the next paragraph, the empirical studies on strategic groups will be reviewed.

Empirical Studies on Strategic Groups

Since Hunt (1972) published his study on strategic groups in the home appliance industry, several writers have explored various important aspects of the strategic group concept. Table 1 compares these studies summarizing them along the following dimensions:

(*) The author and year of publication.

(*) The level of strategic grouping.

(*) The component(s) of the strategic grouping.

(*) Intended vs. realized strategic groups.

(*) The sample in the study.

(*) Static vs. dynamic treatment.

(*) The variable(s) used to cluster strategic groups.

(*) The technique used to cluster strategic groups.

(*) The definitions of strategic groups.

(*) The main findings of each study.

Some of the important issues arising from these empirical studies are discussed below. First, it can be seen that existing studies have investigated strategic groups at different strategy levels (column 2), specifically, corporate, business, and functional perspectives.

Insert Table 1 About Here

Corporate-level strategy examines the issue of which set of businesses the organization should develop whereas business-level strategy addresses the issue of how to compete in a particular industry or product/market segment. Nevertheless, in some existing studies it is sometimes hard to differentiate between these two levels. For example, in the research of Hunt (1972), Newman (1973, 1978) and Ramsler (1982), it is clear that strategic groups were formed according to corporate level strategy, since the criterion variables for grouping were the dispersion of the firms' product/market activities. Further, studies such as Porter (1979), Oster (1982), Primeaux (1983, 1985), Ryans and Wittink (1985), Fiegenbaum and Primeaux ((1983), (1985)), Baird and Sudharshan (1983), Hayes et al. (1983), implicity identified corporate level strategy since the criterion variables used to cluster strategic groups reflected particular aspects of the entire organization (e.g.,

investment strategy, advertising strategy). On the other hand, studies such as Hatten (1974) and Patton (1976) exemplify strategic groups specified at the business level. This is because most of the firms in the brewing industry are not diversified in other industries and the product is relatively homogeneous. Finally, the studies of Frazier and Howell (1983) and Hawes and Crittenden (1984) defined strategic groups according to functional (marketing) level strategy.

Second, the studies have identified strategic groups according to the components of the firm's strategy (Column 3). Most of the studies used either scope or resource deployment criteria (see Hofer and Schendel (1978)) but some of them used both these components (Ramsler (1982), Fiol (1984)).

Third, the formation of strategic groups depends upon the strategy definition used (i.e., strategy as intentions (ex-ante strategy formulation) or realizations (ex-post inference of intended strategy) (Mintzberg (1978)) Column 4). Most studies have used the realized strategy definition to define strategic groups by inferring strategic intent from ex-post archival financial statement information. Only two stud-ies, Dess and Davis (1984), and Hawes and Crittenden (1984) appear to have defined strategic groups using strategy as intentions. They used a questionnaire to derive perceptual data which they then analyzed to form strategic groups.

Fourth, many industries have been studied. They range from consumer goods industries to producer goods industries, and from single product industries to multi-product industries (see Column 5).

Fifth, few studies have analyzed the dynamic aspects of strategic groups. Only Oster (1982), Ryans and Wittink (1985), and Fiegenbaum and Primeaux ((1983), (1985)) have looked at some dynamic aspects of strategic groups (see Column 6).

Sixth, different strategic dimensions have been used to cluster strategic groups (see Column 7). Some of the authors used such single criteria as market share (Porter (1979), Primeaux (1983, 1985), Fiegenbaum and Primeaux (1983)), advertising to sales ratio (Oster (1982)), and security prices (Ryans and Wittink (1985)). Other writers (e.g., Hatten (1974), Hergert (1983)) used multivariate criteria.

Seventh, strategic groups have been identified using either statistical or rule of thumb procedures (see Column 8). By rule of thumb we mean that the writer had information about the industries that, based with the information on the criterion variables, allowed them to sort the firms logically into strategic groups (e.g., Hunt (1972), Porter (1979), Harrigan (1981)).

On the other hand, some writers who used multiple criteria to identify strategic groups have used such statistical packages as cluster analysis or three mode factor analysis (e.g., Harrigan (1985), Baird and Sudharshan (1983), respectively).

Eighth, different strategic groups were identified in the various studies (see Column 9). In one case no single strategic group was identified in six out of fifty industries. (Hergert (1983: III-28)) while in other studies many strategic groups were consistently identified (e.g., Newman (1973, 1978), Baird and Sudharshan (1983)). Each

writer named the various strategic groups according to some properties that dominated the strategic group membership.

Finally, the main conclusions and purposes of each study can be specified. The main conclusion of Hunt's (1972) study, which was the springboard for the whole field of research, was that strategic group structure can be identified in the home appliance industry. Other studies have reinforced Hunt's conclusions in different industries and at different levels of firm strategy.

Some writers have investigated the structure/conduct/performance paradigm of industrial organization economics. Writers such as Newman (1973, 1978), Hatten (1974), Patton (1976), Hergert (1983), have focused on this aspect of strategic groups. Primeaux (1983, 1985) was able to show that different strategic groups occur at different stages of the investment life cycle. Oster (1982), and Fiegenbaum and Primeaux ((1983), (1985)) examined, movement among strategic groups. The low level of movement seen in these studies may have important implications for the dynamics of competitive strategy. Yet the main studies in the area of strategic groups are 'data-driven.' That is, they identify a number of key strategic dimensions drawn from Porter's (1980:127) or McGee and Thomas's (1986) listing of key strategic variables and typically use cluster analysis with data bases such as COMPUSTAT to form groups of firms who 'cluster' together in terms of their observed strategic behavior. Criticisms have been voiced (McGee and Thomas (1986) as to whether the observed groups made sense to managers within those industries or other interested parties such as investment analysts. What is clearly needed is the adoption of

multiple frameworks (McGee and Thomas 1986) for better understanding of the complexity which exists in competitive and often fragmented service industries. Therefore, it would seem sensible to study managers' beliefs and perceptions about competition and competitors in order to identify the frameworks they use in competitive positioning. Such an approach would clearly identify key strategic dimensions which managers perceive to be important in formulating strategy and provide a better basis for understanding the nature of the strategic dimensions which characterize strategic group formation. Further, it would provide insights into the groupings which make sense to managers and industry analysts and also allow comparison to be made between the quantitative 'data-driven' groupings and the perceptual groupings. Perhaps themes such as policy dialogue (Thomas (1984)) and triangulation in research strategy (Denzin (1978), Jick (1979)) can help researchers and managers make better sense of the strategic group concept.

In the next section, the linkage between strategic groups and competitive strategy is explored.

STRATEGIC GROUPS AND THEIR RELEVANCE FOR COMPETITIVE STRATEGY

Even though many studies have explored different aspects of strategic groups, it is still unclear how the concept of strategic groups can be applied to define and analyze competitive strategy. Therefore, these existing research studies are categorized in terms of factors that are important for formulation of competitive strategy.

The Identification of the Relevant Strategic Dimensions

The identification of the relevant strategic dimensions used by firms in a given industry is a key and often neglected issue in some of the more 'data-driven' studies which determine strategic groups. While these dimensions are extremely important for making sense of strategic groups, they can also be used to assess the mobility barriers (Caves and Porter (1977)) that protect strategic group membership from attack by other firms. For firms which are in the "superior" performing strategic groups, the knowledge of the barriers that protect them can aid their strategic planners in making decisions about where to recommend further investment to protect and reinforce those key strategic barriers. On the other hand, a firm which wants to move to another strategic group may be able to identify a potentially vulnerable strategic dimension (barrier) which may match its competitive skills and strengths, hence provide the firm with a "gateway" to entry into that strategic group.

Researchers need to develop better research instruments for identifying key strategic dimensions. Approaches such as perceptual mapping in marketing and other cognitive mapping techniques (Eden (1984)) can help managers identify their strategic group maps. The maps of industry analysts and brokers can be identified through appropriately designed questionnaires which use closed ended questions and analyze results using multi-dimensional scaling to form relevant groupings.

The Identification of Strategic Group Members

An important rationale for forming strategic groups is to enable planners to identify and better understand the behavior of competitors. But, who are the competitors? In complex industries where firms compete on different strategic dimensions, the definition of the set of competitors for a given firm is not always clear. Porter (1980) suggested that firms in the same strategic group should recognize each other as close competitors while firms in different strategic groups are less closely competitive. Therefore, knowing strategic group membership (the competitors) can aid planners in understanding the bases of competition and in making more effective competitive strategy decisions.

For planners it is important to compare groups defined on the basis of industry wisdom (e.g., analysts, managers insights, etc.) with those derived from empirical, quantitative studies. Differences in these groups may allow managers and analysts to review and reinterpret their notions of competition.

The theory of the strategic structure within an industry and interfirm performance differences[2]

Porter (1979) presented a theory of the determinants of firm-level profit based on the strategic structure within the industry. According to this theory and the empirical findings that partially support it, firms following similiar strategies will tend to have similiar performance profiles.

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[2]The underlying theory is explained in pages 10 and 11 of this paper.

For example, suppose that two strategic groups exist within an industry (SG1, SG2) and two performance measures, risk and return, are considered by the companies (see Figure 2).

Insert Figure 2 About Here

It can be seen that different performance levels can be associated with each strategic group. This information may help strategic planners. For example, should firms stay in the same strategic group and benefit from the average level of performance, or to try and move to another more attractive strategic group requiring a different financial and capital structure profile but which provides an improved potential average profit level.

The causal relationship between structure, strategy and performance

Some writers, among them Hatten (1974), Patton (1976), Hergert (1983), found that different relationships exist between performance measures and elements of industry structure and strategy for firms in different strategic groups. Thus, careful modelling of the strategy-structure relationship should highlight the important strategic factors (and variables) for each strategic group and indicate how they differ across groups. For example, in one of the Purdue brewing studies (Patton (1976)) the relationship between Debt (strategic element) and ROE (a performance measure), was examined for each strategic group. For the national brewer strategic group and for the small regional brewer strategic group positive relationships were found (regression coefficients of 0.15 and 0.33 respectively). On the other hand, for the large regional strategic group the relationship was found to be

negative (regression coefficients of -0.61). Clearly the relevance of debt and the influence of debt varies markedly across strategic groups. Similar patterns can be found for other key strategic dimensions in those and other studies. Therefore, the strategic importance of certain key dimensions can more clearly be assessed.

Porter (1980: 138-140) also argued that the structure of strategic groups has implications in explaining industry rivalry, and hence, firm performance. Strategic groups characteristics, such as, the number of strategic groups, the extent to which different strategic groups are competing for the same customers, and the strategic distance among strategic groups were mentioned by Porter as important elements. Hergert (1983) showed empirically that the characteristics of strategic group structure affect the market performance of firms within industries.

In summary, the strategic groups structure within an industry has an impact on firms performance. Therefore, when either existing or potential firms are trying to evaluate their future performance potential, the strategic groups structure as well as the characteristics of the specific group should be considered.

Understanding Strategic Group Dynamics

Understanding dynamics in strategic management is crucial since the formulation of competitive strategy is an evolutionary process. Several writers have investigated dynamic aspects of strategic groups. Oster (1982), and Fiegenbaum and Primeaux (1983, 1985) found a low level of movement among strategic groups. Huff, Thomas, and Fiegenbaum (1985) have considered the role of grounded theories and

model building approaches in understanding strategic group dynamics and speculate that organizational inertia barriers (MacMillan and McCafferty (1982), Harrigan (1980)) as well as mobility barriers may hinder shifts between groups and thus explain the low level of movement. Further research on this topic should provide important guidelines for the determination of competitive strategy.

The Prediction of Benchmark Strategic Groups

The studies of Kumar, Thomas, and Fiegenbaum (1984a, 1984b) have highlighted another aspect of strategic group dynamics. Examining the nature of the future strategic group equilibrium as the industry evolves can provide guidelines (benchmarks) for strategic planners in examining the viability of alternative competitive strategies. Some future strategic group positions may appear more attractive as the firm considers the match between its skills and the available environmental opportunities.

SUMMARY

Today, 13 years after the publication of Hunt's (1972) study, there is much confusion about the implementation of the strategic group concept (McGee and Thomas (1986)). The main problem is that different researchers have used different measures to describe the firms' strategy. They range from one variable (e.g., market share) to many variables. Most of the studies have treated the problem statically, rather than dynamically. According to Mintzberg (1978: 934), strategy is "a pattern in a stream of decisions," that is, the behavior over time of a firm's actions, an aspect not considered in

most studies. In their study of the brewing industry Hatten and Schendel (1977: 110) concluded that "attention to homogeneity over time, as across sections, is likely to be worthwhile." Indeed, in a later study Hatten and Hatten (1985) found that both group membership and the strategic relationships clearly changed over time.

Huff, Thomas, and Fiegenbaum (1985) argued for more research into the dynamics of strategic groups. Since the firm's environment and its expectations and objectives are not stable over time, it is reasonable to expect that the structure of strategic groups may also change over time.

It is clearly important to investigate the linkage between strategic groups and competitive strategy processes so as to develop a clearer theoretical framework for the determination of strategic groups. One key issue in this framework is the appropriate definition of strategy.

For more than three decades, researchers in the field of strategic management have discussed this question of definition. Broadly defined, a firm's strategy matches its internal resources and skills against the threats and opportunities created by its external environment (Hofer and Schendel (1978: 12)). Most would argue that a firm's strategy can be described in terms of three major dimensions:

1) The level of strategy (enterprise, corporate, business, and functional).

2) The component of strategic decisions (scope, resource, deployment, competitive advantage, and synergism).

3) The influence of time on strategic decisions.

These three dimensions capture the nature of the strategic environment. Figure 1 defines the dimensions of the STRATEGIC SPACE (SSP). Thus, a firm's strategic decisions in each level of the organization and for each time period can be depicted in terms of the SSP. It can be seen immediately that strategic groups can be defined for each level of the organization, for each strategic component, and for each time period as well as for any combination of the three.

Following Porter's (1981b) suggestion in an anti-trust symposium, and McGee and Thomas's (1985) paper, in-depth historical analysis of an industry can supplement strategic group analysis by enabling managers and extra-firm policy makers to make sense of complex industries. Further, the industry study of strategic groups obtained by quantitative approaches such as multivariate analysis should be validated by managers and industry analysts as they try to understand competition and close competitors in an industry. It should be noted that little follow-up with industry participants has been reported except in the case of the Purdue brewing industry studies (Hatten (1974) and others) and the more recent studies of Frazier and Howell (1983), Dess and Davis (1984) and Hawes and Crittenden (1984). This richer industry-study approach is also consistent with studies on strategic groups by Hunt (1972) on the home appliance industry and by Hatten (1974) and Patton (1976) on the brewing industry.

CONCLUSIONS

Studying strategic groups can highlight different aspects of competitive strategy. First, identifying the strategic dimensions

that define strategic groups is a key issue in understanding how competitors formulate their strategies. Second, strategic groups help us understand which firms compete strongly with each other. Third, strategic groups can throw light upon the character and performance differences associated with the range of competitive strategies adopted in the industry. Fourth, the strategic groups structure can be used as a framework for modelling competition and hence in explaining performance differences between strategic groups. Fifth, an understanding of the dynamics of strategic groups is useful in explaining changes in competitive strategy over time. Sixth, the concept of benchmark strategic groups (which represent long-run competitive equilibruim positions) may be important in understanding future strategic group positions.

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Figure 1

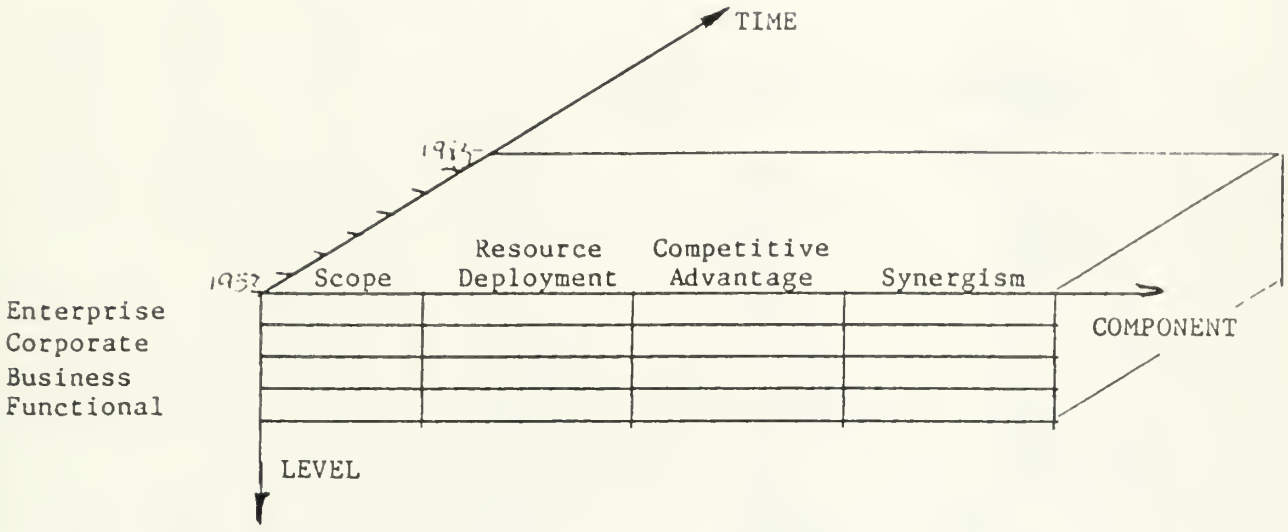

Figure 1: The Strategic Space (SSP)

Figure 2

Figure 2: Risk/Return Groups

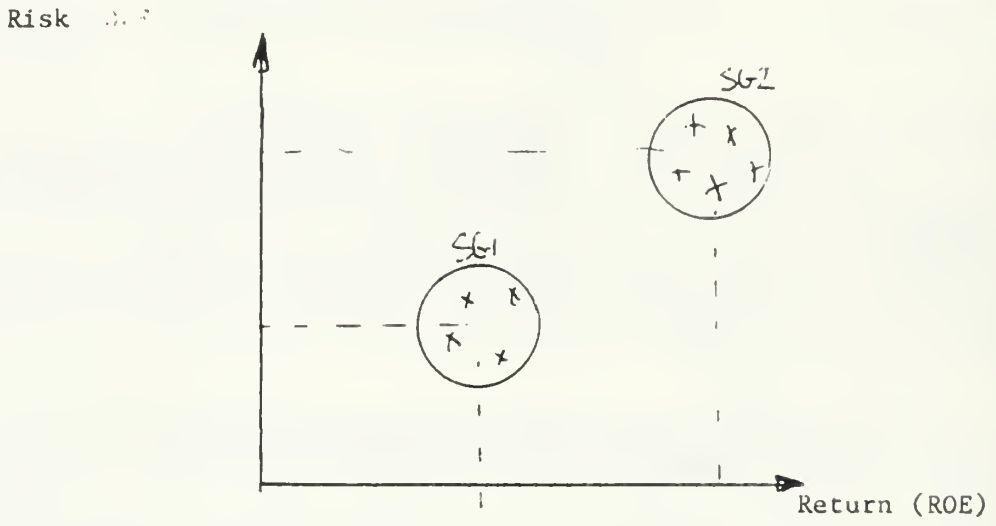

Table 1: Summary Table of Empirical Studies on Strategic Groups

1. Author/year	2. Level of strategy	3. Component of strategic decisions	4. Intended/ realized strategy	5. Sample	6. Statics/ dynamics	7. Criterion variable(s)	8. Clustering technique	9. Strategic groups	10. Main findings
1. Hunt (1972)	corporate	scope	realized	home appliance industry	static	product line	rule of thumb	1. full line national manufacturer 2. part line national manufacturer 3. private brand producers 4. national retailers	Different firms use different strategy.
2. Neumann (1973, 1978)	corporate	scope	realized	34 chemical process industries	static	diversification strategy	rule of thumb	1. integrated producer of petroleum products 2. specialty producer of agricultural chemicals 3. full-line producer of food products 4. conglomerate partially based in chemicals 5. full-line producer of ferrous metals 6. full-line producer of chemicals and allied products	The more homogenous strategic groups, the higher the profit with the industry.
3. Hatten (1974), Hatten and Schendel (1977), Hatten, Schendel and Cooper (1978)	business	resource deployment	realized	13 firms in the brewing industry	static	different variables represent manufacturing, financial and marketing strategy	statistical test	strategic groups according to their strategic closeness	The relationship between profitability and strategic variables is different for different strategic groups.
4. Patten (1976), Schendel and Patton (1978)	business	scope	realized	12 firms in the brewing industry	static	firm size and geographic scope	rule of thumb	1. national firms 2. large regional firm 3. small regional firm	Principally the same as Hatten (1974). The main difference is that in these studies they assumed that firms have multiple goals.
5. Porter (1979)	corporate	scope	realized	42 consumer good industries	static	firm's market share	rule of thumb	1. Leaders groups (30% market share) 2. Followers groups (the rest 70%)	In some industries the leader groups were on average more profitable than the followers and vice-versa.
6. Harrigan (1981)	corporate	scope	realized	9 industries	static	depends on the industry	rule of thumb	depends on the industry	Different strategic memberships in different industries

Table 1 (cont'd.)

1. Author/year	2. Level of strategy	3. Component of strategic decisions	4. Intended/ realized strategy	5. Sample	6. Static/ dynamic	7. Criterion variable(s)	8. Clustering technique	9. Strategic groups	10. Main findings
7. Oster (1982)	corporate	resource deployment	realized	19 consumer good industries	static & dynamic	Advertising expenditures over last year sales (A_t/S_{t-1})	statistical test	1. High level of A/S ratio 2. Low level of A/S ratio	Low level of firm movement among strategic groups.
8. Kamalar (1982)	corporate	scope and resource deployment	realized	100 largest non-U.S. brands	static	1. Product of market differentials 2. Foreign country presence size	statistical test	strategic groups according to entry strategy	Different strategic groups membership have different strategies
9. Primeaux (1983)	corporate	resource deployment	realized	petroleum industry	static	firm's market share	rule of thumb	1. Leader group (30% market share) 2. Follower group (the rest 70%)	The petroleum industry as a whole and the follower group were in the adolescence stage of the investing life-cyle. The leading group was the senility stage of investment life cycle.
10. Primeaux (1985)	corporate	resource deployment	realized	petroleum and textile industries	static	firm's market share	rule of thumb	1. 30%/70% as above 2. 20%, 30%/50%	Different strategic groups are oo different stages of the investment life cycle.
11. Ryans and Wittink (1985)	corporate		realized	airline industries	dynamic	firm's security price	statistical test	Strategic groups according to security price movement	Strategic groups can be identified according to CAPM model.
12. Fiegenbaum and Primeaux (1983)	corporate	resource deployment	realized	9 industries	dynamic	firm's market share	rule of thumb	Different strategic groups for each industry	Low level of movement across strategic groups in adjacent years.
13. Baird and Sudharshan (1983)	corporate	resource deployment	realized	office equipment	static	six financial markets	statistical test	Six groups according to their financial closeness	Different firms, different pricing strategy.
14. Hayes, Spence and Marks (1983)	corporate	resource deployment	realized	investment banking industries	static	the match between the characteristics of individual investment bank with characteristics of individual customers	statistical test	Four strategic groups	Substantial competition was within groups and less between groups.

Table 1 (cont'd.)

1. Author/year	2. Level of strategy	3. Component of strategic decisions	4. Intended/ realized strategy	5. Sample	6. Static/ dynamics	7. Criterion variable(s)	8. Clustering technique	9. Strategic groups	10. Main findings
15. Hergert (1983)	business	resource deployment & scope	realized	2450 SBU representing 50 industries	static	1. Advertising/ sales 2. R&D/sales 3. Asset/sales 4. Business unit sales as a percent of parent sales	statistical test	Ranging from 0 (no strategic group) to 4 strategic groups	The structure-conduct-performance paradigm is homogeneous industries rather than for heterogeneous industries.
16. Frazier and Howell (1983)	functional (marketing)	scope	realized	wholesalers in the medical supply	static	customer groups and customers functions	rule of thumb	Hospital firms and physician firms Mixed firms	Firms in different strategic groups behave differently and have different performance.
17. Dess & Davis (1984)	Business	scope & resource deployment	intended	22 firms in the paints and allied products	static	21 competitive methods	statistical test	1. Focus 2. Differentiation 3. Overall cost leadership	Variation in intra-industry profitability and growth across strategic groups.
18. Hawes and Crittenden (1984)	functional (marketing)	resource deployment	intended	supermarket chains for generic brand grocery products	static	18 variables represent different marketing strategy dimensions	statistical test	1. Aggressive initiators 2. Conservative reactors 3. Submissive defenders	Firms in different strategic groups have different performance profile.
19. Fiol (1984)	corporate	scope & resource deployment	realized	forest and paper products	static	21 variables	statistical test		
20. Hatten and Hatten (1985)	business	resource deployment	realized	7 firms in the brewing industry	static	4 marketing variables	statistical test	National, regional and small brewer groups	Marketing variables (4 Ps) have an impact on firm's performance.
21. Fiegenbaum and Primeaux (1985)	corporate	scope & resource deployment	realized	Drug perfume and electronic industries	dynamic	7 variables represent firms' strategy	statistical test	Different # of strategic groups for each industry	Strategic group members are most likely to remain stable over time. In addition, there are performance differences among strategic groups.
22. Harrigan (1985)	corporate	resource deployment	realized	92 retailing establishments	static	5 variables representing firms' strategy	statistical test	7 clusters represent similarities of the 5 strategic variables	Different strategic groups have different levels of mobility barriers.